

## **MEMO**

**DATE:** November 30, 2015 (*Updated 06/15/16*) **Project No.: 15075** 

**TO:** Rick Beason

**FROM:** Kathy Recker

**CC:** Bryan Redlin, File

**SUBJECT:** The Village at Totem Lake Theoretical Shared Parking Demand Study

Phase 1 Lower Mall

GRAELIC has developed a theoretical shared parking demand analysis for Phase 1 Lower Mall of The Village at Totem Lake Development project.

The theoretical parking demand is calculated utilizing the standard parking requirement by building use. The parking supply supporting the study area is not dedicated for any one particular building's use although it is understood that a specified number of spaces within the development may be reserved for a particular use. Shared parking takes advantage of the fact that some parking spaces are only used part time by a particular motorist group. For instance office tenants are on site typically Monday – Friday 8:00 a.m. – 5:00 p.m. The parking spaces used by the office tenants during this time period would become available for retail, restaurant and other use in the evenings and on the weekends.

The theoretical parking demand for The Village at Totem Lake has been calculated based on building data obtained from the Preliminary Merchandising Plan dated May 9, 2016 and response to requests for clarification and/or additional information provided by Centercal Properties. The parking demand has been calculated utilizing building square footage for restaurant, retail, grocery, and bank for both existing and proposed new buildings. The demand is based on 100 % occupancy of all buildings. A reduction of 20-25% has been applied to account for common space areas such as closets, hallways, storage, aisles, freezer areas, etc. based on the particular building use (retail, restaurant, grocery, etc.). It should be noted that the residential parking requirement has not be included as part of this study. The dedicated residential spaces that are nested within the development are provided strictly for their use. The residential parking demand is considered satisfied (self-parked).

The proposed parking inventory is comprised of 878 surface parking and on-street parking spaces and 239 structured parking spaces totaling 1,117 spaces. These spaces are provided within the development site. However, 41 spaces of this inventory will be dedicated for a nearby medical office's use. Based on this information the available parking inventory for the development has be reduced accordingly. The adjusted parking inventory for the study is 1,076 parking spaces. No other

parking spaces and/or building parking requirement of any adjacent parcels have been applied to this demand analysis.

Graelic has developed two theoretical shared parking demand models. The first is based on the Centercal anticipation of providing 4 parking spaces per 1,000 gross square feet for all building uses. The second demand model is based on the Institute of Transportation Engineers (ITE) guide for parking requirement ratios for calculation of this theoretical parking demand. The calculation is based on the individual use gross square footage.

## **Centercal Shared Parking Demand**

The following table represents the proposed parking to be provided for the individual building uses.

Building Use	Gross Square	Adjusted	Spaces/1,000	Parking
	Footage	Gross Square	Gross Square	Demand
		Footage	Footage	
Restaurant	4,959	3,719	4	15
Retail	207,141	155,356	4	621
Grocery	56,322	42,242	4	169
Bank	7,591	5,693	4	23
Total	277,163	207,010		828

Utilizing the building information extracted from the Preliminary Merchandising Plan and Centercal proposed parking calculation the theoretical shared peak parking demand for the development occurs at 2:00 p.m. for 797 parking spaces on a Saturday. The current parking inventory is for 1,076 parking spaces. The shared parking demand indicates a surplus in available parking of 279 parking spaces.

## **ITE Shared Parking Demand**

The following table represents the parking requirement for the individual building uses.

Building Use	Gross Square	Adjusted	Spaces/1,000	Parking
	Footage	Gross Square	Gross Square	Demand
		Footage	Footage	
Restaurant	4,959	3,719	7.1	26
Retail *	207,141	155,356	4.36	677
Grocery *	56,322	42,242	5.45	230
Bank	7,591	5,693	5	28
Total	277,163	207,010		961

\*Note: 85th percentile parking demand rate per 1,000 gsf.

Based on the above ITE parking calculation the theoretical shared peak parking demand occurring at 2:00 p.m. is for 919 parking spaces on Saturday. With the proposed parking inventory of 1,076 parking spaces indicates a surplus in available parking of 157 parking spaces.

## **Supply Cushion**

A comfortable level of available parking is between 10-15 % of available parking spaces at peak demand. This available parking is referred to as effective supply cushion to account for a search and find factor. A parking operation is most efficient when there is a cushion of available parking spaces and is not parked at 100% capacity. If a parking operation has reached or neared capacity, it may be viewed by the end user as inadequate if they must find the last available parking space(s). Part of the search and find factor includes not only searching for available parking but also takes into account misparked vehicles, spaces that maybe blocked off for repairs, etc. These are all factors that that can attribute to the amount of time spent by the end users to find an available parking space. A comfortable supply cushion is in the typical range of 10-15% at peak demand as follows:

Under the current Centercal shared parking demand the peak parking requirement is 797 spaces which equates to a need for 80-120 in available parking spaces. The calculated surplus at peak is 279 parking spaces. This exceeds the recommended 10-15% supply cushion and provides for a 35% cushion in available parking inventory.

The ITE shared parking peak demand is for 919 parking spaces which would equate to a need for 92-138 in available parking spaces. The current surplus in parking at peak is 157 parking spaces. This exceeds the recommended supply cushion and provides for a 17% cushion in available parking inventory.